

to
by

See pages 14-21, Report by ⁵
Edward Jack C. C. on lands owned
by the New Brunswick Railway Co.

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THE
NEW BRUNSWICK RAILWAY
AND ITS LAND GRANTS.

THE NEW BRUNSWICK RAILWAY.

THE New Brunswick Railway begins at the Village of Gibson, on the eastern bank of the River St. John, eighty-five miles from the sea, and extends to Edmunston at the confluence of the St. John and Madawaska rivers, a distance of 161 miles. It has two branch lines: the Aroostook Branch, $19\frac{1}{4}$ miles long, and the Woodstock Branch, 11 miles long, making in all $191\frac{1}{4}$ miles of road. The gauge of the road is three feet six inches; but in the construction of the road-bed, bridges and culverts, regard has been had to its probable adaption to the standard gauge, and its timber and stonework is of such a character that it would be necessary for that purpose simply to move the rails, which could be done at small expense. It was built under the inspection of an Engineer appointed by the Government, whose certificate was requisite to entitle the Railway Company to the subsidy of 10,000 acres of land per mile.

The general character of the country through which this road passes will be understood from the statement of the fact that, from the City of St. John to the Quebec boundary at St. Francis, a distance of *three hundred miles*, there is a continual succession of well-cultivated farms, with numerous towns and villages, on both sides of the River St. John, except for a distance of about three miles in York County, and about five miles in Victoria County. For one hundred and eighteen miles the N. B. Railway follows the St. John through this rich and prosperous region, and of the remaining

seventy-three and a quarter miles of its total mileage, forty are through long-settled and thrifty agricultural sections. The unoccupied lands along the Railway are nearly all well adapted for farming, and have remained vacant heretofore only because they were difficult of access. It is safe to say that within a very few years the whole length of the Railway, except perhaps some ten or twelve miles, will pass across cultivated farms.

Gibson, the starting point of the Railway, is one of several villages collected within a radius of three miles, and containing in the aggregate a population of about three thousand five hundred. It is the natural centre of a very large section, which includes some of the finest farming lands in the County. It is half a mile above the mouth of the Nashwaak, a stream intersecting a well-settled district of very considerable extent. On the south bank of the Nashwaak begins that succession of lowlands or intervalles, as they are called, which extends many miles down the river, and is occupied by an exceedingly well-to-do class of farmers. Irrespective of the country intersected by the Railway, Gibson is the natural trade centre of an agricultural population of about six thousand people. It is beginning to command a large trade from up the Railway line. The trade of the rich parishes on the eastern side of the St. John was until recently done in Fredericton, which city is situated directly across the St. John River; but there has been a great change since the opening of the Railway, and Gibson promises to become a mercantile centre of very considerable importance.

Fredericton is the capital of New Brunswick. It has a population of about 7,000, and has railway connection with St. John and the United States. It is visited by many tourists every year, a great number of whom go up the N. B. Railway for the sake of the very attractive scenery to be found along the river. It is difficult to imagine more beautiful views than those which unfold themselves like a panorama to the tourist up the St. John Valley. As this is becoming

more widely known, the stream of summer travel is increasing. This of itself is no unimportant factor to be taken into account in considering the future business of this Railway. The relations between Fredericton and Gibson are so intimate as to make them practically one centre. Four steam-ferries run regularly between the two places. The St. John is here upwards of one-half a mile wide, and is navigable to this point during the whole season of navigation by vessels of one hundred tons, and during spring and fall by vessels of large size. Gibson is practically accessible at any time during the season of open water, by such vessels as are ordinarily engaged in the West Indian trade and the coasting trade of the United States.

The station grounds at Gibson consist of a block of land containing eight acres, held by the Company under a ninety-nine years lease (with covenant for renewal), at a rental of \$270 per annum. They have a frontage of 1,700 feet on the St. John River, including a wharf with 400 feet riverfrontage. Upon these premises are four dwelling houses for the use of certain officers of the road; also the head offices of the Railroad and of the land department, together with wood and freight sheds, passenger station, engine-house, turn-table and machine-shops, all in good order. The machine-shops are more complete than any other railway machine-shops in the Maritime Provinces of Canada, except the Intercolonial Works of Moncton; and the Company is independent of any outside aid whatever in keeping the road and rolling-stock in repair, and in the construction of every description of rolling-stock except locomotives. The machinery in the shops is as follows:—

- 1 Stationary Engine.
- 1 Pony Engine for pumping.
- 1 Double-ended Wheel-lathe.
- 1 Axle and Wheel-lathe.
- 1 Gap-screw Cutting-lathe.
- 1 Small Screw-lathe for light work.

- 2 Drill Machines.
- 1 Shaping Machine.
- 1 Bolt-cutting Machine.
- 1 Steam Hammer.
- 1 Gay and Wood Planer.
- 1 Grooving and Surface Planer.
- 1 Four foot Dia. Circular-Saw and Table.
- 1 One foot Dia. Circular-Saw and Table.
- 1 One do do for grooving.
- 1 Tenon Machine.
- 1 Variety Moulding-Machine.
- 1 Band-saw.
- 1 Straight Moulding Machine.
- 2 Emery Grinding Machines, with all the necessary fittings and hand tools, the whole in good order.

For the first twelve miles, or to Keswick Station, the N. B. Railway follows the St. John river, and is for the greater part of the distance near the river bank. No more beautiful or more prosperous section of country, from an agricultural point of view, can be found in Canada. At Keswick there is a commodious station building, which is well situated as respects the trade of a very large tract lying farther up the St. John. The railroad here enters the valley of the Keswick, a branch of the St. John, which it follows for $16\frac{1}{2}$ miles, or to Upper Keswick, passing Zealand Station at $7\frac{3}{4}$ miles from Keswick. What has been said of the St. John Valley as a farming district, is true, only on a smaller scale, of the Keswick valley; but in addition to the settlements, through which the railway line passes, large agricultural districts lie on either side of the railway, and are intersected by nearly five hundred miles of highway road, the railway stations being located with a view to furnishing central points for the shipment of produce. Millville station is 10 miles from Upper Keswick, and is an important centre for freight. The next station to Millville is Woodstock Junction, $13\frac{3}{4}$ miles farther up the line. There is a large two story hotel and dining hall here owned by the

Company; which contains also the station master's office. Here are also fuel sheds, an Engine house with car scales, sidings, etc.

The country between Millville and Hartland, the next station to Woodstock Junction and 9 miles from it, is mostly all a forest; but new settlers are locating themselves at different points, and as the land is, except for a few miles, of most excellent character, it will probably be soon all occupied by farms. In the meantime, the shipment of the produce of the forest furnishes a good deal of business to the road. At Hartland the railroad again enters the St. John Valley. This is a place of considerable trade, which must increase as the settlement of the back country progresses. Hartland is the trading point, not only for the old communities along the river, but also for large new settlements in the interior. Here are a station, freight house, sidings, etc.

From this point until the terminus at Edmunston is reached, the railway follows the river, being at no point more than a mile away from it, passing through an unbroken settlement all the way, although at a few points the forest is standing along the track, where the road runs through wood lots upon improved farms. On the eastern side of the river and extending back from it, in some places fifteen miles, are a succession of fine new settlements. These are rapidly growing in wealth and importance. Where twenty-five years ago the forest was unbroken, are broad farms and commodious buildings. The soil is very fertile. On the west bank of the river, the settlements extend in tier after tier to the United States boundary, a distance of from 9 to 11 miles, and thence for many miles into Aroostook, Me. The first station above Hartland is Florenceville, which takes its name from a village on the opposite side of the river. A steam ferry plies between these points. Nine miles west of Florenceville is Centreville, and four miles further is Bridgewater, Me., both trade centres for a large area of settled country. At Florenceville station there is in addition to the station building, a freight house and

sidings. Kent station is $3\frac{1}{2}$ miles above Florenceville. Here connection is made by highway with the head waters of the Miramichi, as well as with several fine settlements. From this station large quantities of supplies are sent to the woods for the use of parties engaged in lumbering. Bath station is three miles beyond Kent, and Muniac $11\frac{1}{2}$ miles beyond Bath. A large Scotch colony has lately been located near Muniac, which within a few years must afford considerable business to the road. Muniac is a point for the shipment of produce from and supplies to the very excellent farming district on the west bank of the St. John. Passing for 8 miles over the rich farms of Perth, the station of that name is reached. At this point, the railroad crosses to the west bank of the St. John, by a bridge eight hundred feet long to Andover, the shire town of Victoria county. Andover and Perth are the seat of a large lumber and local trade, and are situated near the mouth of the Tobique, one of the largest tributaries of the St. John. Too much stress cannot be laid upon the future importance of the Tobique River as a feeder to the Railway. It is sixty-three miles to the forks of the stream, and the settlements have reached that distance, although they are not continuous.

There is a steady influx of people into the farming lands adjacent to the Tobique. This river drains an area of a million acres, more than one-half of which is tillage land of the best description, and is owned by the N. B. R. Co., and is unoccupied. Andover has good hotels, and is a resort for tourists who are attracted by the fishing in the Tobique and neighboring streams. Aroostook Junction is the next station above Andover, and is six miles from it. In addition to the station are sidings and engine-house, turn-table, &c. Limestone Station is $8\frac{1}{2}$ miles above the Junction. It takes its name from the American village of Limestone, 4 miles distant. From Limestone Station to Grand Falls, the next station is 10 miles. Here there is a large freight and passenger station, an engine-house, turn-table, siding, &c. The station and village take their name from the falls on the St.

John River. Notwithstanding the lack of good hotel accommodation, and the difficulty of reaching the Falls before the construction of the Railway, they attracted many visitors annually.

Now that good hotels have been opened and railway connections bring the Falls within easy reach of the American cities, a tide of summer travel is setting toward this really attractive spot, which must not only add to the importance of the town and lead to the settlement of the adjacent farming lands, but also prove a great source of revenue to the Railway. A large Danish settlement has been established in this vicinity, which although only seven years old is in a most flourishing condition, and last year raised a very large surplus crop, chiefly wheat. This settlement will be largely increased if the adjacent lands are not locked up by the Railway Company.

The physical conformation of the country is such as points to a very prosperous future for Grand Falls, it being the point from which easiest access can be had to an area of upwards of a million acres of well-timbered land belonging to the N. B. R. Company. This land, when cleared, will yield abundant crops.

A short distance above the Falls the Railway again crosses to the east bank of the river by a bridge eight hundred feet long. This was necessary, because from a point $2\frac{1}{2}$ miles above the Falls, the St. John River forms the boundary line between New Brunswick and the United States. The railway here enters Madawaska County, and from this point to Edmunston, thirty-eight miles, is probably the most thickly settled district of New Brunswick. From some points of view the houses appear to form a continuous street, so close are they together.

The first station of importance is St. Leonard's, thirteen miles from Grand Falls. A large trade is done here with Van Buren, an American village on the opposite bank of the St. John, where there are mills and starch factories. A confer-

ence has lately been held between representatives of the Canadian and the United States Governments relative to the bridging of the St. John at this point as well as at Edmunston. Green River Station is $16\frac{1}{2}$ miles above St. Leonard's. Green River is an important stream, as it drains a valuable lumber region belonging to the N. B. Railway Company. It has an excellent mill-site near its mouth. St. Basil Station is four miles from Green River, and $5\frac{3}{4}$ miles from Edmunston, the terminus of the road. Edmunston is the shire town of Madawaska County. It is beautifully situated on rising ground between the St. John and the Madawaska—a large tributary stream which drains the Temiscouata and Toladi lake systems. This town has a large local trade. Although the Railroad goes no further, the banks of the St. John are settled on both sides for forty miles above this point, and large new settlements extend back from the river. Extensive lumber operations are carried on above this point, and the Railroad does a large business in bringing up supplies.

Such is an outline sketch of the main line. The Woodstock Branch is, as above stated, eleven miles long. It gives a short line of road to the United States and the ports on the St. Croix *via* the N. B. & C. Railway, and also through connections with St. John *via* this and the St. John & Maine Railway.

Woodstock is the seat of some mills and manufactories, is the shire town of Carleton County, as well as the centre of a large section containing many valuable farms. The Aroostook Branch leaves the junction of that name and follows the Aroostook River. At four miles it crosses the United States boundary and enters the State of Maine. Three miles from the boundary it reaches Fort Fairfield, an enterprising and flourishing town. There are large station grounds here with station-house, sidings, etc. The present terminus of the branch is Cariboo, twelve miles from Fort Fairfield. Here are an engine-house, stations, turn-tables, etc. Nearly equi-distant from both of these towns, and about ten miles to the South, is

Presqu'île, which does a large trade with the Railway. The fertility of the Aroostook country is proverbial all over the U. S., although the soil is in no wise superior to hundreds of thousands of acres of the N. B. Railway grant which lie on the same geological formation. Aroostook is, comparatively speaking, a newly settled country, but it gives promise of becoming what an eminent authority in the U. S. foretold of it a quarter of a century ago—"the Granary of New England." Notwithstanding the tendency of the American people to "go West," and the inducements held out by Western railway companies, there is a constant influx of first class settlers into Aroostook. During the year 1879, 500 families moved to the Aroostook from other parts of the U.S., and there is no reason to expect any falling off for years to come. The yield of produce is enormous; vast quantities of potatoes are raised, and within the last few years fourteen starch factories, capable of making six thousand tons of starch annually, have gone into operation. The carriage of this starch together with the surplus agricultural and forest produce, affords a large, steady and remunerative freight business to the railroad, when it is remembered that for *three million acres*, of Aroostook County, the N. B. R. is the shortest and readiest outlet, and that although the yield of produce is so vast, the settlement of the country is only fairly begun, some idea may be formed of the probable value in the near future of this Aroostook connection. To briefly summarize, the N. B. Railway is the natural, and at present the only outlet for an area embracing parts of New Brunswick, Quebec and Maine, containing in the aggregate over *eight million acres*, every acre of which is valuable, either for its timber or as farm land. And by very much the greater part of it is not only well timbered, but is of the highest fertility. It begins at the head of navigation, for ocean-going vessel on the St. John, and extends to within seventy-seven miles of the Intercolonial, at a point near Rivière Ouelle, to which a line for a railway easy of construction can be found. If this is built, the distance from Quebec and all points west of St. John will

be two hundred and forty miles less than via the I. C. Railway. Its construction would give to the interior provinces, the shortest possible route to the sea, and to a winter port over British soil. In this event, the importance of the N. B. Railway as a part of the great Canadian Railway system, extending from the Atlantic to the Pacific, can hardly be over-estimated. As these things are yet in the future, we will confine our attention to the local trade. This is increasing, and must within a few years be very much larger than it is now. With the increase of population has come a better system of agriculture. It must be borne in mind, that the present prosperity of the country has been attained in spite of the serious drawbacks, resulting from imperfect means of transportation to a market. Now that this has been remedied, and this immense area of fertile land with its vast stores of timber is easily accessible, and those articles of agricultural produce for which it is best adapted find a ready market in Great Britain, it is reasonable to expect even more rapid progress than that which has marked the last quarter of a century.

The equipment of the N. B. Railway consists of:—

10 Locomotives, (mostly nearly new.)

9 Passenger Cars.

117 Freight Cars.

4 Snow Ploughs.

20 Hand Cars.

22 Hand Lorries, and a full assortment of track tools.

There are self-feeding water Tanks erected at every twelve miles of the road. Although the Railway was in course of construction, and notwithstanding the almost unprecedented stagnation in all departments of business, the net earnings of the railway for the past two years were \$54,000.00. The earnings for the three months of December, January and February last, shew an increase of *forty-three per cent.* over the corresponding three months of the previous year. The timber lands of the Company have been, and must continue to be a great source of revenue, and although owing to the great

depression in the lumber trade, only a small portion of the lands was under lease, sufficient revenue has been collected from them to meet a large portion of the interest on the bonds. The first charge for stumpage was seventy-five cents per thousand superficial feet for spruce ; one dollar a thousand for pine logs ; fifty cents a ton for birch, with corresponding rates for cedar. This has been increased from time to time, and the stumpage now collected is \$1.50 per thousand superficial feet for spruce ; \$2.00 for pine ; \$1.00 per ton for birch, and corresponding rates for cedar and other lumber. Should the present improvement in the lumber market continue, it is the intention of the Trustees to increase the stumpage on spruce to \$2.00 per thousand, on pine to \$2.50, and on other lumber in proportion.

The cost of the New Brunswick Railway was as follows :—

Bonds issued.....	\$1,994,000
Cash subsidies.....	177,000
Cash from Stock subscription.....	507,000
Rolling stock purchased from earnings of road.....	54,000

Total cost \$2,732,000

The sole liability of the road consists of the bonds above mentioned, and these are chargeable upon the land ; the road, rolling stock and property of every description belonging to the Corporation.

In addition to the road and its equipment, the N. B. Railway Company have as assets their grant by way of subsidy from the Provincial Government of 1,647,772 acres of land, less 600 acres sold, leaving 1,647,172 in the hands of the Company. Of this, there is on the head waters of the Miramichi River 300,000 acres, upon which from a long experience in lumbering operations backed by the opinion of experienced foresters, I estimate there is an average of 5,000 superficial feet of spruce and pine to the acre, or *fifteen hundred millions* in all. On the St. John and its tributaries the re-

mainder, consisting of 1,347,172 acres, lies. This will average 1,500 superficial feet per acre, or *two thousand and twenty millions* in all, making a grand total of spruce and pine for the whole Railway grant of *three thousand five hundred and twenty million* superficial feet. The birch, ash, elm and other exportable hard woods will average one ton per acre, or 1,647,172 tons.

The amount of cedar is incalculable. It is very much within the mark to estimate an average of 2,000 superficial feet per acre, or 3,294,000,000 feet in all. This, at the present rates of stumpage collected by the Company, namely, \$1.50 per 1,000 for spruce and pine and cedar, and \$1.00 per ton for birch, ash, elm and other hardwoods of exportable value, represent a total present value of \$11,837,655, and there would yet remain a large quantity of valuable wood. In addition to this, on one block of 40,000 acres in Carleton County, through which the Railroad runs, it is estimated that there is besides all other lumber 160,000,000 superficial feet of hemlock logs, which will give 160,000 cords of hemlock bark, worth at present rates \$1.25 per cord for stumpage. This lumber is now ready to be cut and is all within comparatively easy reach, the Railway lands being intersected in all directions by large streams. This fact, and the facilities afforded by the Railway for carrying supplies to the interior, give these timber lands a greater value than similar land in other localities. In addition to the trees now standing and of marketable value, there is a large young growth supplying the place of what is cut away, so that with a prudent system of forestry and careful management on the part of the land officers, there is no good reason why the supply of lumber should ever be exhausted, although if the lands of the Company are opened for settlers it will naturally be diminished as the settlements increase. These estimates of lumber are so large as to be almost startling, yet they are too low in the opinion of many persons well qualified to judge by a lifetime spent in and about the lumber woods.

It is worthy of remark that while the land grants of the Western Railways in the United States are lessened in value by the reservation of alternate blocks by the Government, the New Brunswick Railway lands form a continuous area. In conclusion, it may be noticed that while the area of the Province of Prince Edward Island is 2,173 square miles, and that of the State of Rhode Island 1,306 square miles, the territory owned by the New Brunswick Railway is 2,575 square miles. Before the grants of the land issued, each section was explored by experienced agents of the Company, and all of inferior quality rejected.

ALEX. GIBSON,

Managing Trustee for the Bondholders of the
New Brunswick Railway.

APPENDIX No. 1.

FREDERICTON, NEW BRUNSWICK, }
28th February, 1880. }

SIR,—

At your request, I have prepared a short report on the lands granted by the Province of New Brunswick to the New Brunswick Railway Company.

The vast extent of country covered by the grants, and the short length of time allowed me in which to prepare this sketch, preclude the possibility of minuteness. I have endeavored to state as accurately as possible such facts as have come to my knowledge during many years of labour as Deputy Crown Land Surveyor, among the forest-covered lands referred to in the annexed brief report.

Your obedient servant,

ALEX. GIBSON,
Managing Trustee
For the New Brunswick
Railway.

EDWD. JACK,
Deputy Crown Land Surveyor
For the Province of New
Brunswick.

The following tracts of land situated on the Saint John, Miramichi, and Restigouche Rivers, and their branches, were granted to the New Brunswick Railway at the dates specified :—

Granted in 1873.

		Acres.
1st tract	 W. of Tobique River.....	92,417
2nd "	 Grand River.....	26,000
3rd "	 Odell River.....	39,700
4th "	 Gulquac.....	18,400
5th "	 S. W. Miramichi.....	94,900
6th "	 Southampton.....	8,300
7th "	 Becaguimec.....	41,000
8th "	 Little Salmon River.....	30,583
		351,300 ac.

Granted in 1874.

1st tract	 Little Clearwater.....	4,855
2nd "	 N. Branch S. W. Miramichi.	21,500
3rd "	 W. of Tobique R.....	17,600

Granted in 1874—Continued.

		Acres.
4th tract	north Becaguimec.....	4,570
4th "	south Do.....	8,095
5th "	north Northampton	5,882
5th "	south Do	718
6th "	 Acker's Brook.....	2,608
6th "	east Do.....	392
7th "	 Green River.....	32,560
8th "	 Grand River.....	49,940
		148,720 ac.

1st tract	 Mamosekel and Little To- bique	151,387
2nd "	 N. Branch S. W. Miramichi.	14,601
3rd "	 Green River.....	26,800
4th "	 Do	4,600
5th "	 Northampton	1,709
6th "	 Do	538
		199,635 ac.

Grants issued in 1876.

1st tract	 Baker Lake.....	11,200
2nd "	 Up. St. Francis.....	45,450
3rd "	 W. Side Tobique.....	25,900
4th "	 Head of Restigouche.....	76,450
5th "	 E. of Ennishone.....	10,800
6th "	 W. Side of Tobique R....	20,000
7th "	 E. Side of Wapskehegan...	56,500
8th "	 Riley Brook.....	10,640
9th "	 N. Branch S.W. Miramichi.	27,000
10th "	 Knowlesville.....	15,500
11th "	 Naciwicac	905
		300,345 ac.
Record	24,140 W. of Tobique R.....	1,664
"	24,139 Rocky Brook.....	3,721
"	23,162 Kent & Stanley (Stanley, 58,187 ; Kent, 8,813)....	67,000
		72,385 ac.

Grants issued in 1878.

1st tract	 N. Br. S.W. Miramichi....	92,381
2nd "	 Gulquac.....	21,822
3rd "	 Grand River.....	8,640
4th "	east Do	10,790
4th "	west Do	10,677
5th "	" W. of Tobique.....	7,000
6th "	" Green River.....	12,650
7th "	" E. of Ennishone.....	5,773
		169,733 ac.

Grants issued in 1879.

1st tract	 Haley Brook.....	13,336	
2nd "	.. } Heads of Tobique S. Br. }	205,421	
3rd "	.. } & Gulquac Rivers.... }	1,158	
4th "	 Jardine's Brook.....	65,362	
5th "	 Head of Restigouche R....	127,049	
			412,326 ac.

Total..... 1,654,444 ac.

From this amount is to be deducted
for deficiency in 9th tract, 1876,
2,888 acres, and in the 8th tract,
1874, 3,784 acres.

Total deficiency..... 6,672 ac.

Net amount granted N. B. Rail. Co. 1,647,772 ac.

Six hundred acres must be deducted from the above amount
of 1,647,772 acres, the same having been transferred by
the Company to others.

In describing the lands of the New Brunswick Railway Company, as the greater quantity are situated on the River St. John or its tributaries, I will commence with a description of the quality of the soil there, and of the timber growing thereon, and from thence proceed to a description of those situated on the Miramichi River and its tributaries, which are generally different from the former, both as regards quality of soil and varieties of timber. I will say nothing of the soil of the Miramichi lands owned by the Company, they being generally useless for farming purposes, and adapted merely to the uses of the lumber man. A large part of these Miramichi lands are enclosed in the spruce belt described by me in the report of Dr. Baily and myself hereafter referred to.

The grants situated to the east of the Woodstock Junction, and shown on the plan annexed, are generally covered by the red soil of the sub-carboniferous rocks which is generally so well adapted for farming as mentioned by J. F. W. Johnston, F.R.S., in his report on the agricultural resources of New Brunswick. The lands embraced in them are covered by an extensive growth of hemlock, spruce, cedar, birch, and numerous other varieties of wood. As these lands were selected by myself personally, I can speak confidently of them and of their value. Much spruce has been cut in this country, but much growing and thrifty trees yet remain.

As the soil is good, the increase in the growth will average from $1\frac{1}{4}$ to $1\frac{1}{2}$ inches in diameter to each tree for a period of five years. This, when the immense number of small trees which

are found in these forests are considered, adds yearly much to the value of these lands. There is here yet much birch fit for small timber, but the growth of this wood not being rapid, when the larger trees are cut out, some time must elapse before those which remain are large enough for the market. Neither the hemlock nor cedar have been cut on this land. Both of these woods abound here; indeed, this is one of the best hemlock localities in the Province. This wood is gradually becoming scarcer all through New Brunswick; it has nearly disappeared from the Eastern States, and the extensive firm of tanners, W. Shaw & Co. (the leading firm in this business in America), are erecting extract of hemlock bark works not far from this vicinity.

The New Brunswick Railway Company stumpage, or charge for hemlock bark standing, is one dollar per cord. These lands will yield from two to four cords to the acre. The land on which this timber grows will, after the wood is cut and good roads made through it, bring from \$2 to \$3 per acre, or even \$4, time being given in which to make the payments for the same.

The opportunities for road-making are good, and the land is in near proximity to the railway, as well as at a moderate distance from St. John River.

I repeat again, from my own personal knowledge, that the greater part of this land is excellent. Indeed the land on the south branch of the Becaguimec, which was rejected by me as being very much inferior to that which I selected, has been applied for by settlers, many of whom have gone thereon to work and make farms.

The Company's land situated between the north and south branches of the Becaguimec is not good settling land, but is covered with a young and thrifty growth of spruce; it has in the past yielded large quantities of timber, and will do so again when the young trees have time to increase in diameter to the required size. The quantity of acres here is not very large.

The land lying between the Nashwaak and St. John Rivers, is high hardwood land, having on it much birch timber, the Railway Company's stumpage for which is one dollar per ton. This is good land for settling purposes.

A tract of good farming land comprising many thousands of acres extends from Forreton or Beaufort on the south-west Miramichi, to the Tobique River, a stream which drains one of the most fertile, if not the most fertile districts in New Brunswick, tens of thousands of whose acres continuously are of the most fertile character.

No part of the grant to the New Brunswick and Nova Scotia Lands Company will compare with it for a moment. Prior to the building of the New Brunswick Railway, it was so distant from markets as to be of little value.

To particularize as nearly as possible, I may say, that, com-

mencing at the mouth of the Tobique, and extending up that river to the line of the County of Restigouche, thence to the Grand River, twelve miles above the Grand Falls, following the Grand River from its source to its mouth, and thence down the Saint John, to the mouth of the Tobique, is to be found the most fertile land in New Brunswick, long swelling ridges covered by a growth of rock maple, birch and beech, and occasionally elm, and a good deal of black ash, which borders many of the streams.

This country is almost entirely free from surface stone, presenting in this respect, as well as in that of its fertility, a most favourable contrast to the land on the seaboard and middle section of New Brunswick, which is generally of inferior quality.

The soil of the fertile belt referred to rests on the upper silurian rocks, which are here distinguished by calcareous slates, whose decomposition yields lime in great abundance. Professor Johnston, in his report quoted above, says that "it is on this formation that the richest upland soils of the Province are formed."

From the Grand River to the Saint Francis, as well as towards the Restigouche, I am not sufficiently well informed as regards the state of the country (having visited it but seldom), to express an opinion.

I may, however, state that I am informed by very reliable explorers, that on Green River, and some of the other tributaries of the Saint John above Grand River, as well as on that river, and the head of the Restigouche, cedar is found of large size, and in great abundance.

On many of the branches of Tobique, I observed this wood in great abundance. At some not very future day, a large income will accrue to the owners of the soil for stumpage on this wood.

I am also informed that there is a considerable quantity of good settling land on the Railway Company's property between the Grand River and Saint Francis.

As regards the lands owned by this Company on the Saint John and its branches, I can safely say without fear of contradiction, that from 500,000 to 800,000 acres of it is by far the best forest covered land in New Brunswick, it only requires good roads to be made through it to be at once bought up by settlers, who would pay from \$1.50 to \$2.00 per acre for the same. These payments should be made by annual instalments, commencing when the settler is fairly under way; they should of course be chargeable upon the land, these lands being good, the security for the purchase money due thereon, would yearly improve. Along the shore of New Brunswick, and in its middle section, the growing timber was the best part of the lot; in the country of which I speak, it is the soil.

Persons to whom climate is a consideration, will find on reference to the Meteorological Reports of the Dominion of

Canada, that the winters of New Brunswick are on the average nearly 20° warmer than at Winnipeg, in Manitoba. And further, that if the trees have to be cleared away before the soil can be made available, these furnish fuel in abundance to warm and cheer the settler in the winter nights, and to protect his clearings from the winds which sweep with such severity over the extensive and often treeless plains of Manitoba.

The productiveness of the soil on the fertile belt named, may be judged of by that of the County of Aroostook (the best county in the State of Maine, so far as the soil is concerned), of which it is the extension to the north-east, that being about the usual strike of the rock belts on the river St. John. It may be as well to say something about the timber on the railway lands on the Saint John; as space is limited, I give but a short synopsis, referring those who wish further information, to a descriptive catalogue of the woods and minerals of New Brunswick, prepared by Dr. L. W. Bailey, of the University of New Brunswick, and myself, at the instance of the Government of New Brunswick, for use at the Centennial Exhibition at Philadelphia, in 1876.

BIRCH.—The lands of the New Brunswick Railway Company monopolize nearly all of the birch timber on the most accessible places on Saint John River and its tributaries, with the exception of that which is to be had on the Aroostook, and some few other streams which take their rise in the State of Maine.

MAPLE.—This excellent wood abounds nearly everywhere over the Company's lands.

BEECH.—This tree, generally indicative of a poor soil when found in great quantities, is yet interspersed among the other hardwood trees over the various tracts owned by the Company, on St. John River.

BLACK ASH.—This extremely handsome wood is found abundantly fringing the shores of the various tributaries of the St. John, especially above the Grand Falls. It is particularly abundant on the Grand River.

SPRUCE.—This tree is not nearly so plentiful on the good farming lands of the Company on the St. John as it is on the rocky and inferior lands of the Miramichi. It occurs, however, (the white variety especially) in numerous localities on the Company's lands on the St. John, scattered here and there through the forests. When spruce deals are high in the European market, many logs will be gathered from various places. Late low prices have discouraged log-haulers from cutting scattering timber, which is always more expensive to get than that which grows in bodies.

CEDAR.—This valuable wood, which must yearly increase in value, is found in very great abundance on the Company's lands.

THE N. B. R. R. COMPANY'S LANDS ON THE MIRAMICHI AND ITS
BRANCHES.

These are, as before stated, essentially timber, and not farming lands. They comprise, without any doubt, by far the best timber lands on the Miramichi, and it is upon them that the saw-mills at Chatham and Newcastle, the sea-ports of this river, must largely depend for their supply of spruce. These ports now export per year to Europe deals to the amount of about 60,000 standards. The stumpage or royalty which is now charged by the Company on spruce logs is \$1.50 per m. feet, superficial measure (two m. feet are nearly equivalent to a standard), the yield of six or seven trees. This will, no doubt, ere long increase to \$2.50 to \$3.00 per m., as is now charged on the St. Croix, the river which divides the State of Maine from New Brunswick.

The Company's lands on this river will yield from thirty to fifty million feet of spruce timber for many years to come. The number of acres on the Miramichi will be probably upwards of 300,000 acres.

In conclusion, it may be safely affirmed that this Company has now nearly a monopoly of the really valuable forest-covered agricultural lands in the Province of New Brunswick.

This Railway Company has also the most compact body of black spruce in New Brunswick, which is situated on the shores and adjacent to streams possessing excellent facilities for bringing the timber near them to market at the seaboard.

From its position on the Miramichi River, and the cheapness with which supplies and men can be taken from the railway stations into the forest, it must always occupy a commanding position, in as far as the numerous steam saw-mills on the Miramichi River are concerned, which must be largely dependent on this source of supply to keep them employed.

EDWARD JACK,

Deputy Crown Land Surveyor for New Brunswick.

APPENDIX No. 2.

SUPPLEMENTARY REPORT.

FREDERICTON, N. B., 28th February, 1880.

SIR,—

In reference to your enquiries respecting the Geology and Mineralogy of your very extensive territory, I beg leave to state that your property covers generally the rocks of the older geological formations, and is caused by one of the great granitic belts which traverses New Brunswick; as it is covered by forests but few explorations have been made regarding its mineral wealth, and these in a very hasty and desultory manner. When I have been engaged in explaining them it was with an eye to timber and not minerals.

Your territory is crossed by what Sir William Logan calls the "Quebec Group," which here carries iron, copper, antimony and lead, to what extent I know not; but, from what I do know, I consider that the examination of this district by a competent mineralogist, would be followed by many valuable discoveries. It was only last Autumn that Stebnite (Sulphide of Antimony), and Galena (Sulphide of Lead) containing a very small proportion of silver, 1,893 ounces to the ton of 2,000 lbs, as determined by Mr. Hoffman, of the Geological Survey of Canada, was discovered.

This discovery was made when there was a little snow on the ground, late in the Autumn. I have not yet been able to ascertain the extent and size of the veins, but can do so when the snow leaves. Near the granite is the best locality to seek for minerals in New Brunswick. This is where the metals I refer to, as examined by Mr. Hoffman were found. In the same belt of rocks in which the Antimony deposit of Prince William, mentioned in the Cyclopædia Britannica, under the heading of Antimony, is found.

The small specimen of yellow sulphide of copper which I saw came from the Tobique.

Yours truly,

EDWARD JACK.

A. GIBSON, ESQ.,

Managing Trustee N. B. Railway.